VIENNA SYMPHONIC LIBRARY

Vienna Instruments
Harps

Mapping Documentation

Harp 1
Harp 2

Contents

Introduction

This document contains the mapping list for the Harps Collection of Vienna Instruments. You will find in it a comprehensive survey of the articulations/patches for the Standard and the Extended Libraries of each instrument, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset in the collection.

Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping, the mapping layout will be shown in a detailed graphic.

The velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109-127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

A/B switching normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

Speed controller switches naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here.

Abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
4gl, 5gl, 6gl, 7gl	harp glissando: number of tones to the octave	leg	legato
		lo	long
all	combination of all the instruments of a type	ma	major
		me	medium (speed)
arp	arpeggio	mi	harmonic (sharp) minor
aug	augmented	mute	damped after plucking (secco)
damp	damped string	nail	fingernail
dim	diminished	ped-gl	pedal glissando
fa	fast	pent	pentatonic
gliss	glissando	sh	1short
HA	Harp 1	sl	slow
HA2	Harp 2	st	straight

The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.

1 1st and 2nd violin	9 Bassoon, contrabassoon
2 Viola	10/11 Trumpet
3 Cello	12/13 Horn
4 Double bass	14/15 Trombone
5 Harp	16 Tuba
6 Concert flute, piccolo	17 Timpani
7 Oboe, English horn	18 Drums, cymbals
8 Clarinet, bass clarinet	19 other percussion instruments
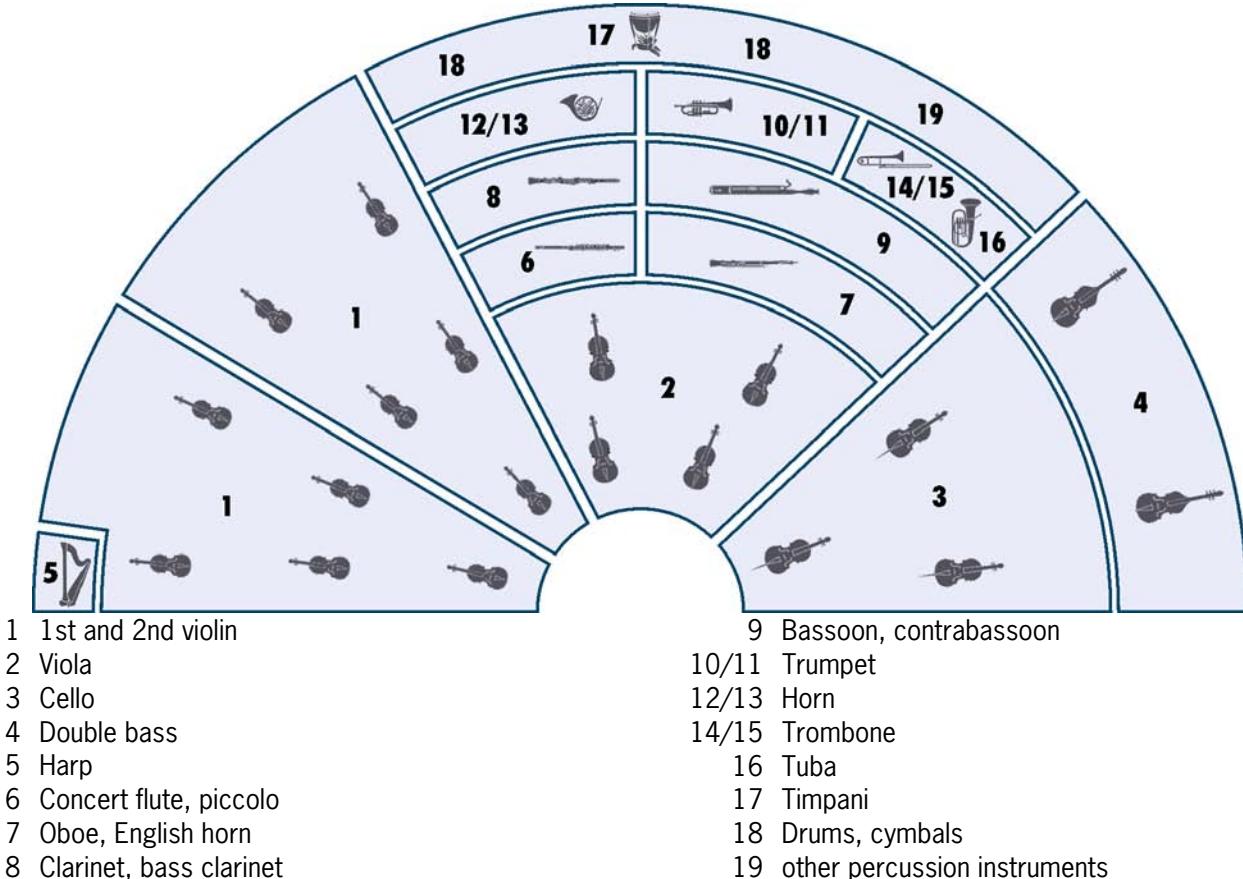
Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

28 Harp I

Description

The harp, a stringed and plucked instrument, is one of the oldest and most widespread musical instruments known to man.

In modern orchestral and concert playing the double-action pedal harp has established itself, a model with 7 pedals and 47 strings tuned diatonically in Cb major. (The tuning is not called B major for reasons of convenience. By depressing all the pedals to the first or second notch, the tuning can be raised to C natural and C sharp.)

Range and notation

The harp has a range from Cb1–G#7.

As with the piano, harp notation is written on two staves and is non-transposing. The lower staff is in bass clef, the upper in treble clef. If required by the register both staves can be in the same clef, either bass or treble.

Sound characteristics

Gentle, metallic, blurring, resonant, short, hard, drifting, full-sounding, rushing, clear, brilliant, glittering, flowing, dull, mellow, sharp, crystal clear, reverberating, splashing, cascading.

The full-sounding notes of the lower register resonate for a long time.

A brilliant and warm timbre is characteristic of the middle register. Notes resonate for one or two seconds. It is chiefly in this register that chords, harmony, arpeggios, glissandos and melody lines are played.

The high register has bright, hard and penetrating notes that die away very quickly.

Combination with other instruments

The harp combines well with all orchestra groups.

It has the function of fleshing out the sound and is often treated as a filling-in instrument. The bottom strings are often used to play the bass voice. The weaving of delicate harmonic sound backdrops (arpeggio technique) is another of its quintessential tasks. In addition, it is the various types of harp glissando that lend the undulations of the orchestra the shimmer of brilliance which is one of the most fundamental sound experiences of them all.

The harp achieves a good blend with the strings because they are related to each other as stringed instruments. With the woodwind, chords in unison with the harp are one of the key combinations.

Patches

01 SINGLE NOTES   Range: B0–A7
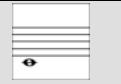
Single notes
Level 1: Normal, muted, harmonics, and bisbigliando
Level 2: Près-de-la-table, normal with muted release

01 HA1_normal		Samples: 246	RAM: 15 MB	**Level 1**

Single notes: Normal
3 velocity layers
2 Alternations

02 HA1_mute		Samples: 246	RAM: 15 MB	**Level 1**

Single notes: Muted
3 velocity layers
2 Alternations

03 HA1_pres-de-la-table		Samples: 162	RAM: 10 MB	**Level 2**

Single notes: Près-de-la-table
The strings are plucked near the resonating body of the harp, thus giving it a sharper, 'drier' sound.
2 velocity layers
2 Alternations

04 HA1_flageolette	Range: E3–A6	Samples: 38	RAM: 2 MB	**Level 1**

Single notes: Harmonics or flageolet tones
1 velocity layer
2 Alternations

05 HA1_bisbigliando	Range: A2–E7	Samples: 76	RAM: 4 MB	**Level 1**

Single notes: Bisbigliando or 'whispering', a sound effect created by soft tremolo play on the harp.
1 velocity layer
Release samples

11 HA1_normal+RS-mute		Samples: 480	RAM: 30 MB	**Level 2**

Single notes: Normal with muted release samples
3 velocity layers
Release samples
2 Alternations
AB switch: release volume high/low

02 GLISSANDI   Range: C3–E5

Glissandos
Level 1: Medium speed major, diminished, pentatonic, and whole tone
Level 2: All speeds, major, minor, diminished, pentatonic, and whole tone
The patches are mapped to white keys.

02 GLISSANDI/01 Major slow speed   Range: C3–E5

01 HA1_7gl-sl_C-ma (through to B-ma)   Samples: 56   RAM: 3 MB   Level 2

Slow scale glissandos, C to B major, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:

C3–D4: 1 octave glissandos, in various ranges (p and f for C and B, mf for other scales)
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
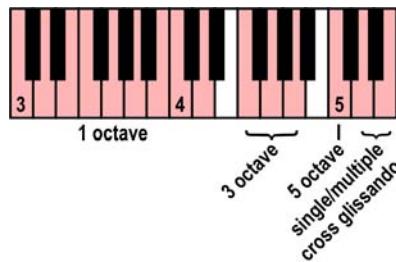
02 GLISSANDI/02 Major medium speed   Range: C3–E5

01 HA1_7gl-me_C-ma (through to B-ma)   Samples: 56   RAM: 3 MB   Level 1

Medium scale glissandos, C to B major, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:

C3–D4: 1 octave glissandos, in various ranges (p and f for C and B, mf for other scales)
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
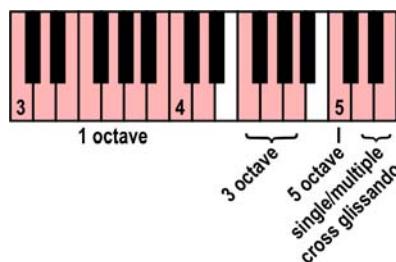
02 GLISSANDI/03 Major fast speed   Range: C3–D7

01 HA1_7gl-fa_C-ma (through to B-ma)   Samples: 74   RAM: 4 MB   Level 2

Fast scale glissandos, C to B major, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos, and fortissimo octave glissandos
2 velocity layers
AB switch: up/down

Mapping:

C3–D4: 1 octave glissandos, in various ranges (p and f for C and B, mf for other scales)
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
C6–D7: 1 octave glissandos, fortissimo, in various ranges
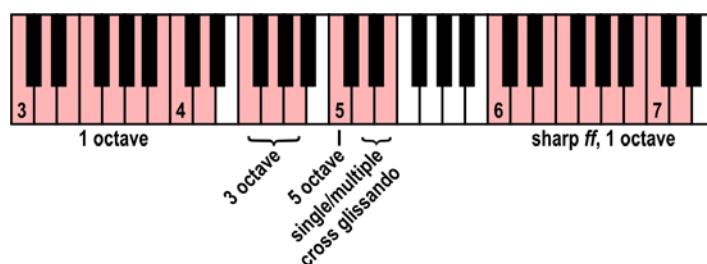
02 GLISSANDI/04 Minor slow speed   Range: C3–E5

01 HA1_7gl-sl_C-mi (through to B-mi)   Samples: 56   RAM: 3 MB   Level 2

Slow scale glissandos, C to B minor, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:

C3–D4: 1 octave glissandos, in various ranges (p and f for C and B, mf for other scales)
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
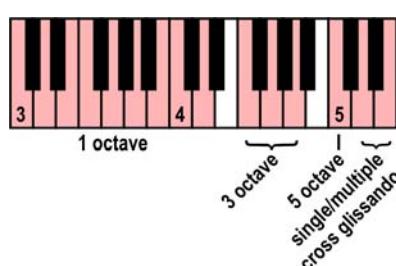
02 GLISSANDI/05 Minor medium speed   Range: C3–E5

01 HA1_7gl-me_C-mi (through to B-mi)   Samples: 56   RAM: 3 MB   Level 2

Medium scale glissandos, C to B minor, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

> **Mapping:**
> C3–D4: 1 octave glissandos, in various ranges (p and f for C and B, mf for other scales)
> F4–A4: 3 octave (p/f)
> C5: 5 octave (p/f)
> D5: single cross-glissando (p/f)
> E5: multiple cross-glissando (p/f)
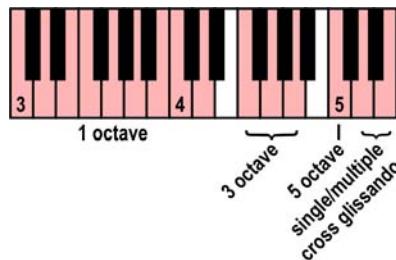
02 GLISSANDI/06 Minor fast speed   Range: C3–D7

01 HA1_7gl-fa_C-mi (through to B-mi)   Samples: 74   RAM: 4 MB   Level 2

Fast scale glissandos, C to B minor, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos, and fortissimo octave glissandos
2 velocity layers
AB switch: up/down

> **Mapping:**
> C3–D4: 1 octave glissandos, in various ranges (p and f for C and B, mf for other scales)
> F4–A4: 3 octave (p/f)
> C5: 5 octave (p/f)
> D5: single cross-glissando (p/f)
> E5: multiple cross-glissando (p/f)
> C6–D7: 1 octave glissandos, fortissimo, in various ranges
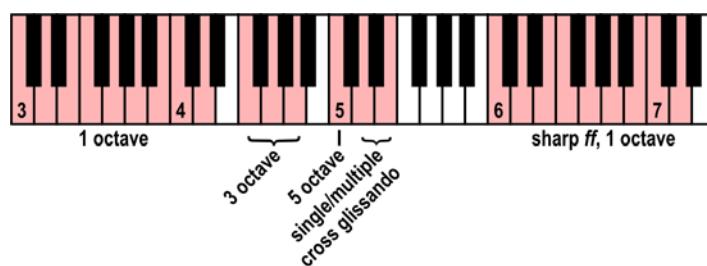
02 GLISSANDI/07 7V major

Glissandos
Level 1: Medium speed major, diminished, pentatonic, and whole tone
Level 2: All speeds, major, minor, diminished, pentatonic, and whole tone
The patches are mapped to white keys.

02 GLISSANDI/07 7V major slow speed   Range: C3–E5

01 HA1_4gl-sl_7V-1 (2/3/4/5)   Samples: 38   RAM: 2 MB   Level 2

Slow 4-note glissandos, major, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: 1 – B, D#, F#, A; 2 – C#, E#, G#, B; 3 – E, G#, B, D;
           4 – F#, A#, C#, E; 5 – G#, B#, D#, F#
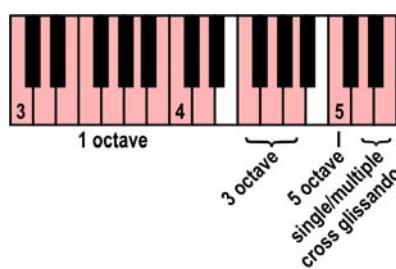
02 GLISSANDI/08 7V major medium speed   Range: C3–E5

01 HA1_4gl-me_7V-1 (2/3/4/5)   Samples: 38   RAM: 2 MB   Level 2

Medium 4-note glissandos, major, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: 1 – B, D#, F#, A; 2 – C#, E#, G#, B; 3 – E, G#, B, D;
           4 – F#, A#, C#, E; 5 – G#, B#, D#, F#
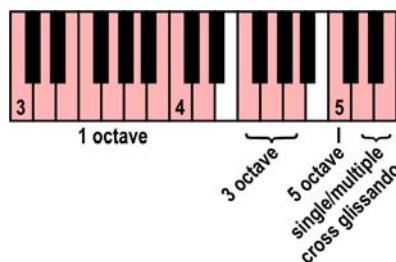
02 GLISSANDI/09 7V major fast speed   Range: C3–D7

01 HA1_4gl-fa_7V-1 (2/3/4/5)   Samples: 56   RAM: 3 MB   Level 2

Fast 4-note glissandos, major, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos, and
fortissimo octave glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
C6–D7: 1 octave glissandos, fortissimo, in various ranges
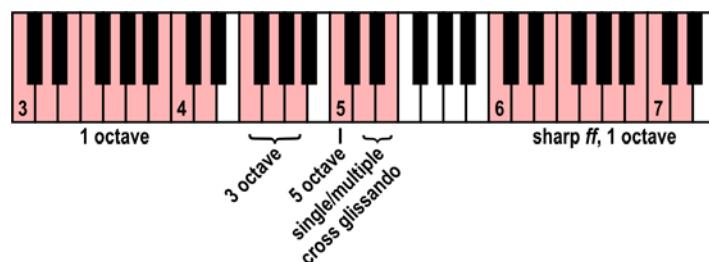
02 GLISSANDI/10 7V minor   Range: C3–E5

Glissandos
Level 1: Medium speed major, diminished, pentatonic, and whole tone
Level 2: All speeds, major, minor, diminished, pentatonic, and whole tone
The patches are mapped to white keys.

02 GLISSANDI/10 7V minor slow speed   Range: C3–E5

01 HA1_4gl-sl_mi7-1 (2/3/4/5)   Samples: 38   RAM: 2 MB   Level 2

Slow 4-note glissandos, minor, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: 1 – C, Eb, G, Bb; 2 – D, F, Ab, C; 3 – F, Ab, B (Cb), Eb;
               4 – G, Bb, Db, F; 5 – Bb, Db, E (Fb), Ab
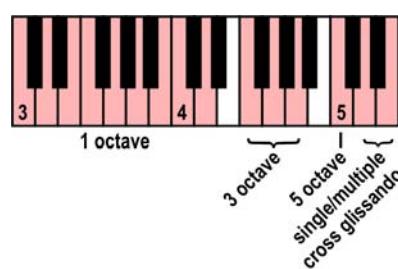
02 GLISSANDI/11 7V minor medium speed   Range: C3–E5

01 HA1_4gl-me_mi7-1 (2/3/4/5)   Samples: 38   RAM: 2 MB   Level 2

Medium 4-note glissandos, minor, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: 1 – C, Eb, G, Bb; 2 – D, F, Ab, C; 3 – F, Ab, B (Cb), Eb;
          4 – G, Bb, Db, F; 5 – Bb, Db, E (Fb), Ab
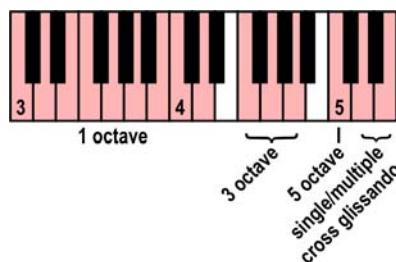
02 GLISSANDI/12 7V minor fast speed   Range: C3–D7

01 HA1_4gl-fa_mi7-1 (2/3/4/5)   Samples: 56   RAM: 3 MB   Level 2

Fast 4-note glissandos, minor, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos, and fortissimo octave glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
C6–D7: 1 octave glissandos, fortissimo, in various ranges
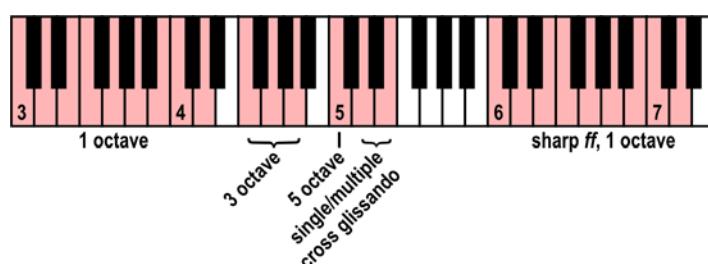
02 GLISSANDI/13 7 diminished   Range: C3–E5

Glissandos
Level 1: Medium speed major, diminished, pentatonic, and whole tone
Level 2: All speeds, major, minor, diminished, pentatonic, and whole tone
The patches are mapped to white keys.

HA1_4gl_dim-C   HA1_4gl_dim-C#   HA1_4gl_dim-D
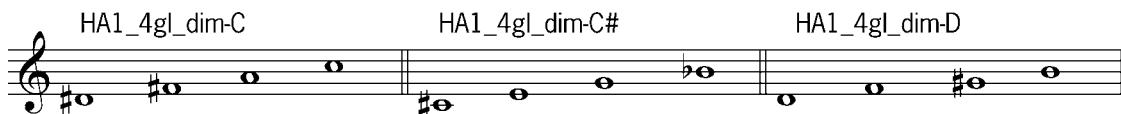
02 GLISSANDI/13 7 diminished slow speed   Range: C3–E5

01 HA1_4gl-sl_dim-C (C#/D)   **Samples: 38   RAM: 2 MB   Level 2**

Slow 4-note glissandos, diminished, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
Base key: C/C#/D
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: C – D#, F#, A, C; C# – C#, E, G, Bb; D – D, F, G#, B
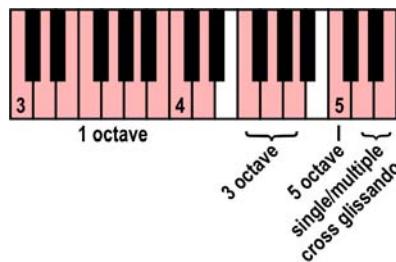
02 GLISSANDI/14 7 diminished medium speed | Range: C3–E5

01 HA1_4gl-me_dim-C (C#/D) | Samples: 38 | RAM: 2 MB | Level 1

Medium 4-note glissandos, diminished, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
Base key: C/C#/D
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: C – D#, F#, A, C; C# – C#, E, G, Bb; D – D, F, G#, B
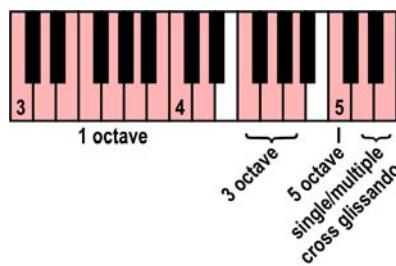
02 GLISSANDI/15 7 diminished fast speed | Range: C3–D7

01 HA1_4gl-fa_dim-C (C#/D) | Samples: 56 | RAM: 3 MB | Level 2

Fast 4-note glissandos, diminished, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos, and fortissimo octave glissandos
Base key: C/C#/D
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
C6–D7: 1 octave glissandos, fortissimo, in various ranges
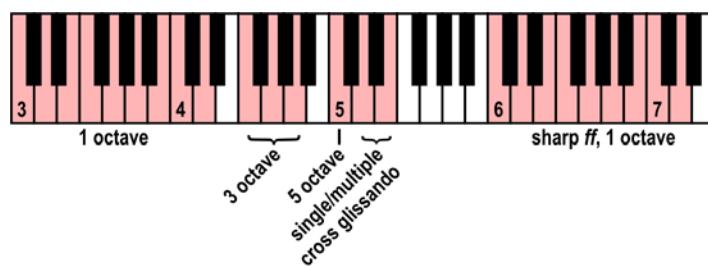
02 GLISSANDI/16 Pentatonic   Range: C3–E5

Glissandos
Level 1: Medium speed major, diminished, pentatonic, and whole tone
Level 2: All speeds, major, minor, diminished, pentatonic, and whole tone
The patches are mapped to white keys.

HA1_5gl_pent-1   HA1_5gl_pent-2   HA1_5gl_pent-3

02 GLISSANDI/16 Pentatonic slow speed   Range: C3–E5

01 HA1_5gl-sl_pent-1 (2/3)   Samples: 38   RAM: 2 MB   **Level 2**

Slow 5-note glissandos, pentatonic, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: 1 – B, C#, D#, F#, G#; 2 – C, D, E, G, A; 3 – Db, Eb, F, Ab, Bb
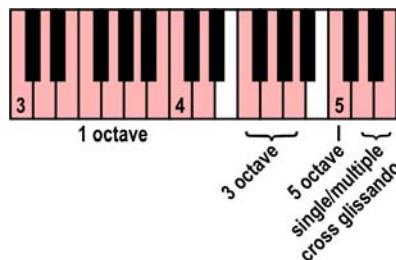
02 GLISSANDI/17 Pentatonic medium speed Range: C3–E5

01 HA1_5gl-me_pent-1 (2/3) **Samples: 38** **RAM: 2 MB** **Level 1**

Medium 5-note glissandos, pentatonic, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: 1 – B, C#, D#, F#, G#; 2 – C, D, E, G, A; 3 – Db, Eb, F, Ab, Bb
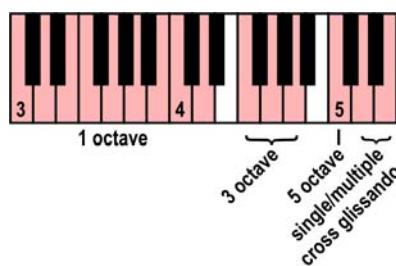
02 GLISSANDI/18 Pentatonic fast speed Range: C3–D7

01 HA1_5gl-fa_pent-1 (2/3) **Samples: 56** **RAM: 3 MB** **Level 2**

Fast 5-note glissandos, pentatonic, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos, and fortissimo octave glissandos
2 velocity layers
AB switch: up/down

Mapping:
C3–D4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
C6–D7: 1 octave glissandos, fortissimo, in various ranges
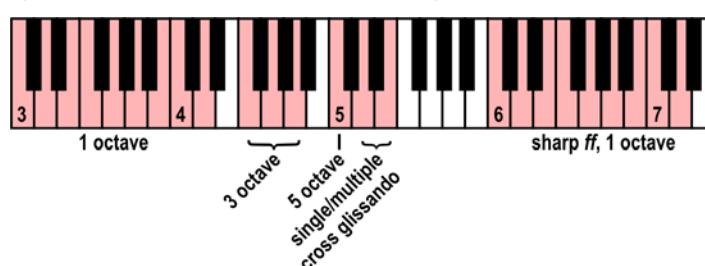
02 GLISSANDI/19 Whole   Range: C3–E5

Glissandos
Level 1: Medium speed major, diminished, pentatonic, and whole tone
Level 2: All speeds, major, minor, diminished, pentatonic, and whole tone
The patches are mapped to white keys.

HA1_6gl_whole-C   HA1_6gl_whole-C#

02 GLISSANDI/19 Whole slow speed   Range: C3–E5

01 HA1_6gl-sl_whole-C (C#)   Samples: 40   RAM: 2 MB   Level 2

Slow 6-note glissandos, whole tone, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
Base key: C/C#
2 velocity layers
AB switch: up/down

Mapping:
C3–E4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: C – C, D, E, F#, G#, A#; C# – C#, D#, F, G, A, B
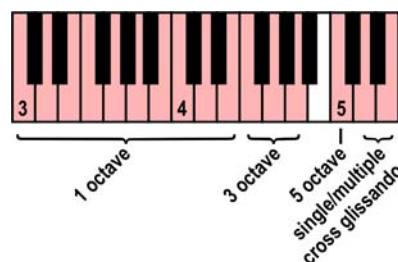
02 GLISSANDI/20 Whole medium speed   Range: C3–E5

01 HA1_6gl-me_whole-C (C#)   Samples: 40   RAM: 2 MB   Level 1

Medium 6-note glissandos, whole tone, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos
Base key: C/C#
2 velocity layers
AB switch: up/down

Mapping:

C3–E4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
Scales: C – C, D, E, F#, G#, A#; C# – C#, D#, F, G, A, B
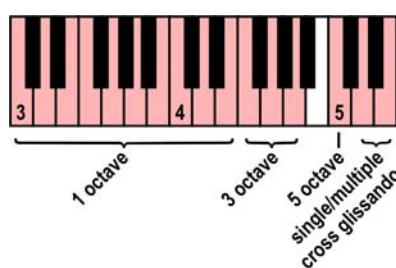
02 GLISSANDI/21 Whole fast speed   Range: C3–A7

01 HA1_6gl-fa_whole-C (C#)   Samples: 66   RAM: 4 MB   Level 2

Fast 6-note glissandos, whole tone, up and down spanning 1, 3, and 5 octaves, single and multiple cross-glissandos, and fortissimo octave glissandos
Base key: C/C#
2 velocity layers
AB switch: up/down

Mapping:

C3–E4: 1 octave glissandos, mezzoforte, in various ranges
F4–A4: 3 octave (p/f)
C5: 5 octave (p/f)
D5: single cross-glissando (p/f)
E5: multiple cross-glissando (p/f)
C6–A7: 1 octave glissandos, fortissimo, in various ranges
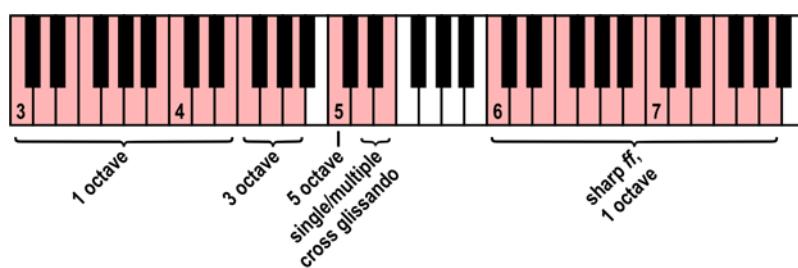
03 ARPEGGIOS a3

3-note arpeggios
Level 2: Major and minor, diminished and augmented upward arpeggios, slow, fast, and straight (played as chords)
Major and minor arpeggios are mapped to the notes of their chords. For mapping illustrations and playing ranges of each Patch, please see the appendix.

03 ARPEGGIOS a3/01 major a3 slow speed   Range: C3–C7

01 HA1_3arp-sl_C-ma (through to B-ma)	**Samples: 26**	**RAM: 1 MB**	**Level 2**

Slow 3-note upward arpeggios, C to B major
Mapping (for C major): C – base, E – 1st inversion, G – 2nd inversion
2 velocity layers

03 ARPEGGIOS a3/02 major a3 fast speed   Range: C3–C7

01 HA1_3arp-fa_C-ma (through to B-ma)	**Samples: 26**	**RAM: 1 MB**	**Level 2**

Fast 3-note upward arpeggios, C to B major
Mapping (for C major): C – base, E – 1st inversion, G – 2nd inversion
2 velocity layers

03 ARPEGGIOS a3/03 major a3 straight   Range: C3–C7

01 HA1_3arp-st_C-ma (through to B-ma)	**Samples: 26**	**RAM: 1 MB**	**Level 2**

Straight 3-note upward arpeggios (played as chords), C to B major
Mapping (for C major): C – base, E – 1st inversion, G – 2nd inversion
2 velocity layers

03 ARPEGGIOS a3/04 minor a3 slow speed   Range: C3–C7

01 HA1_3arp-sl_C-mi (through to B-mi)	**Samples: 26**	**RAM: 1 MB**	**Level 2**

Slow 3-note upward arpeggios, C to B minor
Mapping (for C minor): C – base, D# – 1st inversion, G – 2nd inversion
2 velocity layers

03 ARPEGGIOS a3/05 minor a3 fast speed   Range: C3–C7

01 HA1_3arp-fa_C-mi (through to B-mi)	**Samples: 26**	**RAM: 1 MB**	**Level 2**

Fast 3-note upward arpeggios, C to B minor
Mapping (for C minor): C – base, D# – 1st inversion, G – 2nd inversion
2 velocity layers

03 ARPEGGIOS a3/06 minor a3 straight   Range: C3–C7

01 HA1_3arp-st_C-mi (through to B-mi)	Samples: 26	RAM: 1 MB	Level 2

Straight 3-note upward arpeggios (played as chords), C to B minor
Mapping (for C minor): C – base, D# – 1st inversion, G – 2nd inversion
2 velocity layers

03 ARPEGGIOS a3/07 dim a3 slow speed   Range: C3–D7

01 HA1_3arp-sl_dim (-fa/-st)	Samples: 102	RAM: 6 MB	Level 2

Slow/fast/straight 3-note upward arpeggios, diminished
Mapped chromatically
2 velocity layers

03 ARPEGGIOS a3/10 augm a3 slow speed   Range: B2–C7

01 HA1_3arp-sl_aug (-fa/-st)	Samples: 50	RAM: 3 MB	Level 2

Slow/fast/straight 3-note upward arpeggios, augmented
Mapped chromatically
2 velocity layers

04 ARPEGGIOS a4

4-note arpeggios
Level 2: Major and minor, diminished and augmented upward arpeggios, slow, fast, and straight (played as chords)
Major and minor arpeggios are mapped to the notes of their chords. For mapping illustrations and playing ranges of each
Patch, please see the appendix.

04 ARPEGGIOS a4/01 major a4 slow speed   Range: C3–G6

01 HA1_4arp-sl_C-ma (through to B-ma)	Samples: 24	RAM: 1 MB	Level 2

Slow 4-note upward arpeggios, C to B major
Mapping (for C major): C – base, E – 1st inversion, G – 2nd inversion
2 velocity layers

04 ARPEGGIOS a4/02 major a4 fast speed   Range: C3–G6

01 HA1_4arp-fa_C-ma (through to B-ma)	Samples: 24	RAM: 1 MB	Level 2

Fast 4-note upward arpeggios, C to B major
Mapping (for C major): C – base, E – 1st inversion, G – 2nd inversion
2 velocity layers

04 ARPEGGIOS a4/03 major a4 straight   Range: C3–G6

01 HA1_4arp-st_C-ma (through to B-ma)   **Samples: 24**   **RAM: 1 MB**   **Level 2**

Straight 4-note upward arpeggios (played as chords), C to B major
Mapping (for C major): C – base, E – 1st inversion, G – 2nd inversion
2 velocity layers

04 ARPEGGIOS a4/04 minor a4 slow speed   Range: C3–G6

01 HA1_4arp-sl_C-mi (through to B-mi)   **Samples: 24**   **RAM: 1 MB**   **Level 2**

Slow 4-note upward arpeggios, C to B minor
Mapping (for C minor): C – base, D# – 1st inversion, G – 2nd inversion
2 velocity layers

04 ARPEGGIOS a4/05 minor a4 fast speed   Range: C3–G6

01 HA1_4arp-fa_C-mi (through to B-mi)   **Samples: 24**   **RAM: 1 MB**   **Level 2**

Fast 4-note upward arpeggios, C to B minor
Mapping (for C minor): C – base, D# – 1st inversion, G – 2nd inversion
2 velocity layers

04 ARPEGGIOS a4/06 minor a4 straight   Range: C3–G6

01 HA1_4arp-st_C-mi (through to B-mi)   **Samples: 24**   **RAM: 1 MB**   **Level 2**

Straight 4-note upward arpeggios (played as chords), C to B minor
Mapping (for C major): C – base, E – 1st inversion, G – 2nd inversion
2 velocity layers

04 ARPEGGIOS a4/07 dim a4 slow speed   Range: C3–B6

01 HA1_4arp-sl_dim (-fa/-st)   **Samples: 96**   **RAM: 6 MB**   **Level 2**

Slow/fast/straight 4-note upward arpeggios, diminished
Mapped chromatically
2 velocity layers

04 ARPEGGIOS a4/10 augm a4 slow speed   Range: B2–G#6

01 HA1_4arp-sl_aug (-fa/-st)   Samples: 46   RAM: 2 MB   Level 2

Slow/fast/straight 4-note upward arpeggios, augmented
Mapped chromatically
2 velocity layers

99 RELEASE

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

Matrices

Matrix - LEVEL 1

L1 HA1 Articulation Combi   **Samples: 606**   **RAM: 37 MB**   **Level 1**

Single notes
Normal, muted, flageolet,
bisbigliando

Matrix switches: Horizontal: Modwheel, 4 zones

	H1	H2	H3	H4
V1	normal	muted	flageolet	bisbigliando

L1 HA1 Gliss Major-medium   **Samples: 246**   **RAM: 15 MB**   **Level 1**

Glissandos, medium speed
C to B major
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
major gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

L1 HA1 Gliss Special-medium   **Samples: 192**   **RAM: 12 MB**   **Level 1**

Glissandos, medium speed
Diminished (C/C#/D), pentatonic (Var. 1/2/3), whole tone (C/C#)
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 3 zones

	C1	C#1	D1
diminished	C	C#	D
pentatonic	var. 1	var. 2	var. 3
whole tone	C	C#	C#

Matrix - LEVEL 2 A - Basic

00 HA1 Articulation Combi   **Samples: 1002**   **RAM: 62 MB**   **Level 2**

Single notes
Normal, muted, norm/mute RS
flageolet, pres-de-la-table,
bisbigliando

Matrix switches: Horizontal: Modwheel, 6 zones

	H1	H2	H3	H4	H5	H6
V1	normal	muted	norm/mute RS	flageolet	près-de-la-t.	bisbigliando

Matrix - LEVEL 2 B - Glissandi

O1 HA1 Gliss Major-slow   Samples: 246   RAM: 15 MB   Level 2

Glissandos, slow
C to B major
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

O2 HA1 Gliss Major-medium   Samples: 246   RAM: 15 MB   Level 2

Glissandos, medium speed
C to B major
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
medium gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

O3 HA1 Gliss Major-fast   Samples: 354   RAM: 22 MB   Level 2

Glissandos, fast
C to B major
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
fast gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

O4 HA1 Gliss Major-All   Samples: 846   RAM: 52 MB   Level 2

Glissandos
Slow/medium/fast
C to B major
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
medium gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
fast gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

O5 HA1 Gliss Minor-slow   Samples: 248   RAM: 15 MB   Level 2

Glissandos, slow
C to B minor
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

06 HA1 Gliss Minor-medium   Samples: 248   RAM: 15 MB   Level 2

Glissandos, medium speed
C to B minor
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
medium gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

07 HA1 Gliss Minor-fast   Samples: 356   RAM: 22 MB   Level 2

Glissandos, fast
C to B minor
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
fast gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

08 HA1 Gliss Minor-All   Samples: 852   RAM: 53 MB   Level 2

Glissandos
Slow/medium/fast
C to B minor
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–B1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
medium gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
fast gliss.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

09 HA1 Gliss 7V-Major-slow   Samples: 190   RAM: 11 MB   Level 2

4-note glissandos, var. 1-5
Major, slow
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
slow gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

10 HA1 Gliss 7V-Major-medium   Samples: 190   RAM: 11 MB   Level 2

4-note glissandos, var. 1-5
Major, medium
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
medium gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

11 HA1 Gliss 7V-Major-fast   Samples: 280   RAM: 17 MB   Level 2

4-note glissandos, var. 1-5
Major, fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
fast gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

12 HA1 Gliss 7V-Major-All   Samples: 660   RAM: 41 MB   Level 2

4-note glissandos, var. 1-5
Major, slow/medium/fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1
slow gliss.	var. 1	var. 2	var. 3	var. 4	var. 5
medium gliss.	var. 1	var. 2	var. 3	var. 4	var. 5
fast gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

13 HA1 Gliss 7V-Minor-slow   Samples: 190   RAM: 11 MB   Level 2

4-note glissandos, var. 1-5
Minor, slow
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
slow gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

14 HA1 Gliss 7V-Minor-medium   Samples: 190   RAM: 11 MB   Level 2

4-note glissandos, var. 1-5
Minor, medium
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
medium gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

15 HA1 Gliss 7V-Minor-fast   Samples: 280   RAM: 17 MB   Level 2

4-note glissandos, var. 1-5
Minor, fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
fast gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

16 HA1 Gliss 7V-Minor-All   Samples: 660   RAM: 41 MB   Level 2

4-note glissandos, var. 1-5
Minor, slow/medium/fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–E1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1
slow gliss.	var. 1	var. 2	var. 3	var. 4	var. 5
medium gliss.	var. 1	var. 2	var. 3	var. 4	var. 5
fast gliss.	var. 1	var. 2	var. 3	var. 4	var. 5

17 HA1 Gliss 7Diminished-slow   Samples: 114   RAM: 7 MB   Level 2

4-note glissandos
Diminished (C/C#/D), slow
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
slow gliss.	C	C#	D

18 HA1 Gliss 7Diminished-medium   Samples: 114   RAM: 7 MB   Level 2

4-note glissandos
Diminished (C/C#/D), medium
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
medium gliss.	C	C#	D

19 HA1 Gliss 7Diminished-fast   Samples: 168   RAM: 10 MB   Level 2

4-note glissandos
Diminished (C/C#/D), fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
fast gliss.	C	C#	D

20 HA1 Gliss 7Diminished-All   Samples: 396   RAM: 24 MB   Level 2

4-note glissandos
Diminished (C/C#/D)
Slow/medium/fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 3 zones

	C1	C#1	D1
slow gliss.	C	C#	D
medium gliss.	C	C#	D
fast gliss.	C	C#	D

21 HA1 Gliss Pentatonic-slow   Samples: 38   RAM: 2 MB   Level 2

5-note glissandos, var. 1-3
Pentatonic, slow
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
slow gliss.	var. 1	var. 2	var. 3

22 HA1 Gliss Pentatonic-medium   Samples: 38   RAM: 2 MB   Level 2

5-note glissandos, var. 1-3
Pentatonic, medium
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
medium gliss.	var. 1	var. 2	var. 3

23 HA1 Gliss Pentatonic-fast   **Samples: 56**   **RAM: 3 MB**   **Level 2**

5-note glissandos, var. 1-3
Pentatonic, fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
fast gliss.	var. 1	var. 2	var. 3

24 HA1 Gliss Pentatonic-All   **Samples: 132**   **RAM: 8 MB**   **Level 2**

5-note glissandos, var. 1-3
Pentatonic
Slow/medium/fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–D1   Vertical: Modwheel, 3 zones

	C1	C#1	D1
slow gliss.	var. 1	var. 2	var. 3
medium gliss.	var. 1	var. 2	var. 3
fast gliss.	var. 1	var. 2	var. 3

25 HA1 Gliss Whole-slow   **Samples: 40**   **RAM: 2 MB**   **Level 2**

6-note glissandos
Whole tone (C/C#), slow
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
slow gliss.	C	C#

26 HA1 Gliss Whole-medium   **Samples: 40**   **RAM: 2 MB**   **Level 2**

6-note glissandos
Whole tone (C/C#), medium
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
medium gliss.	C	C#

27 HA1 Gliss Whole-fast   **Samples: 66**   **RAM: 4 MB**   **Level 2**

6-note glissandos
Whole tone (C/C#), fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–C#1

	C1	C#1
fast gliss.	C	C#

28 HA1 Gliss Whole-All   **Samples: 146   RAM: 9 MB   Level 2**

6-note glissandos
Whole tone (C/C#)
Slow/medium/fast
AB switch up/down

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 3 zones

	C1	C#1
slow gliss.	C	C#
medium gliss.	C	C#
fast gliss.	C	C#

Matrix - LEVEL 2 C - Arpeggios

31 HA1 Arp-3 Major-slow   **Samples: 150   RAM: 9 MB   Level 2**

3-note arpeggios
Up, slow
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

32 HA1 Arp-3 Major-fast   **Samples: 150   RAM: 9 MB   Level 2**

3-note arpeggios
Up, fast
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

33 HA1 Arp-3 Major-straight   **Samples: 150   RAM: 9 MB   Level 2**

3-note arpeggios
Up, straight
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

34 HA1 Arp-3 Major-All   **Samples: 450   RAM: 28 MB   Level 2**

3-note arpeggios
Up, slow/medium/straight
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

35 HA1 Arp-3 Minor-slow

Samples: 152   **RAM: 9 MB**   **Level 2**

3-note arpeggios
Up, slow
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

36 HA1 Arp-3 Minor-fast

Samples: 152   **RAM: 9 MB**   **Level 2**

3-note arpeggios
Up, fast
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

37 HA1 Arp-3 Minor-straight

Samples: 152   **RAM: 9 MB**   **Level 2**

3-note arpeggios
Up, straight
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

38 HA1 Arp-3 Minor-All

Samples: 456   **RAM: 28 MB**   **Level 2**

3-note arpeggios
Up, slow/medium/straight
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

39 HA1 Arp-3 Special-All

Samples: 456   **RAM: 28 MB**   **Level 2**

3-note arpeggios
Up, slow/medium/straight
Diminished, augmented

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 3 zones

	C1	C#1
slow arp.	diminished	augmented
fast arp.	%	%
straight arp.	%	%

41 HA1 Arp-4 Major-slow   Samples: 138   RAM: 8 MB   Level 2

4-note arpeggios
Up, slow
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

42 HA1 Arp-4 Major-fast   Samples: 138   RAM: 8 MB   Level 2

4-note arpeggios
Up, fast
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

43 HA1 Arp-4 Major-straight   Samples: 138   RAM: 8 MB   Level 2

4-note arpeggios
Up, straight
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

44 HA1 Arp-4 Major-All   Samples: 414   RAM: 25 MB   Level 2

4-note arpeggios
Up, slow/medium/straight
C to B major

Matrix switches: Horizontal: Keyswitches, C1–B1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

45 HA1 Arp-4 Minor-slow   Samples: 138   RAM: 8 MB   Level 2

4-note arpeggios
Up, slow
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

46 HA1 Arp-4 Minor-fast   Samples: 138   RAM: 8 MB   Level 2

4-note arpeggios
Up, fast
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

47 HA1 Arp-4 Minor-straight   **Samples: 138   RAM: 8 MB**   **Level 2**

4-note arpeggios
Up, straight
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

48 HA1 Arp-4 Minor-All   **Samples: 414   RAM: 25 MB**   **Level 2**

4-note arpeggios
Up, slow/medium/straight
C to B minor

Matrix switches: Horizontal: Keyswitches, C1–B1   Vertical: Modwheel, 3 zones

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1	A#1	B1
slow arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
fast arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
straight arp.	C	C#	D	D#	E	F	F#	G	G#	A	A#	B

49 HA1 Arp-4 Special-All   **Samples: 426   RAM: 26 MB**   **Level 2**

4-note arpeggios
Up, slow/medium/straight
Diminished, augmented

Matrix switches: Horizontal: Keyswitches, C1–C#1   Vertical: Modwheel, 3 zones

	C1	C#1
slow arp.	diminished	augmented
fast arp.	%	%
straight arp.	%	%

Presets

HA1 VSL Preset Level 1   **Samples: 1044   RAM: 65 MB**   **Level 1**

L1 HA1_Articulation_Combi
L1 HA1 Gliss Major-medium
L1 HA1 Gliss Special-medium
Keyswitches: A7, B7, C8

HA1 VSL Preset Level 2   **Samples: 5948   RAM: 371 MB**   **Level 2**

01 HA1 Articulation Combi
Glissandos - all: Major, minor, 4-note major and minor, diminished, pentatonic, and whole tone
Arpeggios - all: major, minor, diminished and augmented
Keyswitches: C7–A#7

29 Harp II

Patches

01 BASIC ARTICULATIONS
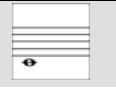
Harp II, single notes
Level 1: Normal, muted, harmonics, and bisbigliando
Level 2: Damped, près-de-la-table, fingernails, pedal glissando, and normal with release variations

01 HA2_normal	**Range: B0–A7**	**Samples: 480**	**RAM: 30 MB**	**Level 1**

Single notes: Normal
3 velocity layers
4 Alternations

02 HA2_mute	**Range: B0–A7**	**Samples: 240**	**RAM: 15 MB**	**Level 1**

Single notes: Muted
3 velocity layers
2 Alternations

03 HA2_damp	**Range: A#1–G6**	**Samples: 108**	**RAM: 6 MB**	**Level 2**

Single notes: Damped
2 velocity layers
2 Alternations

04 HA2_pres-de-la-table	**Range: A1–A7**	**Samples: 138**	**RAM: 8 MB**	**Level 2**

Single notes: Près-de-la-table
The strings are plucked near the resonating body of the harp, thus giving it a sharper, 'drier' sound.
2 velocity layers
2 Alternations

05 HA2_nail	**Range: B0–A7**	**Samples: 160**	**RAM: 10 MB**	**Level 2**

Single notes: Played with the fingernails
2 velocity layers
2 Alternations

06 HA2_flageolette	**Range: G3–C7**	**Samples: 74**	**RAM: 4 MB**	**Level 1**

Single notes: Harmonics or flageolet tones
2 velocity layers
2 Alternations

07 HA2_pedal-gliss	**Range: C1–G#7**	**Samples: 75**	**RAM: 4 MB**	**Level 2**

Single notes: Pedal glissando
1 velocity layer
2 Alternations

08 HA2_bisbigliando	Range: A1–G6	Samples: 172	RAM: 10 MB	Level 1

Single notes: Bisbigliando or 'whispering', a sound effect created by soft tremolo play on the harp.
2 velocity layers
Release samples

11 HA2_normal+RS-mute	Range: B0–A7	Samples: 720	RAM: 45 MB	Level 2

Single notes: Normal with muted release samples
3 velocity layers
Release samples
4 Alternations
AB switch: release volume high/low

12 HA2_normal+RS-ped-gl	Range: B0–A7	Samples: 555	RAM: 34 MB	Level 2

Single notes: Normal with pedal glissando release samples
3 velocity layers
Release samples
4 Alternations
AB switch: release volume high/low

99 RELEASE

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

Matrices

Matrix - LEVEL 1

L1 HA2 Articulation Combi   **Samples: 966   RAM: 60 MB**   **Level 1**

Single notes: Normal, muted, flageolet, and bisbigliando

Matrix switches: Horizontal: Modwheel, 4 zones

	H1	H2	H3	H4
V1	normal	muted	flageolet	bisbigliando

Matrix - LEVEL 2

01 HA2 Articulation Combi 1   **Samples: 1172 RAM: 73 MB**   **Level 2**

Single notes: Normal, muted, normal with muted release samples, près-de-la-table, and flageolet

Matrix switches: Horizontal: Modwheel, 5 zones

	H1	H2	H3	H4	H5
V1	normal	muted	norm/mute RS	près-de-la-t.	flageolet

02 HA2 Articulation Combi 2   **Samples: 1070 RAM: 66 MB**   **Level 2**

Single notes: Played with the fingernails, damped, pedal glissando, normal with pedal glissando release samples, bisbigliando

Matrix switches: Horizontal: Modwheel, 5 zones

	H1	H2	H3	H4	H5
V1	fingernails	damped	pedal gliss.	norm/pedal RS	bisbigliando

Presets

HA2 VSL Preset Level 1   **Samples: 966   RAM: 60 MB**   **Level 1**

L1 HA2 Articulation Combi

HA2 VSL Preset Level 2   **Samples: 1762 RAM: 110 MB**   **Level 2**

2 HA2 Articulation Combi 1
02 HA2 Articulation Combi 2
**Keyswitches:** B7, C8

Appendix

In the following, you will find notations and keyboard layout graphics for major and minor arpeggio, as well as a list of playing ranges for the individual Patches. Notes in brackets signify the fourth tone of 4-note arpeggios.

Arpeggios - major
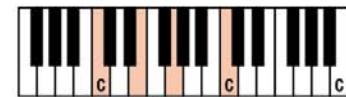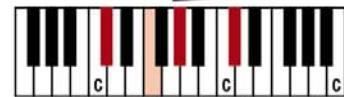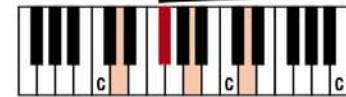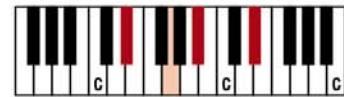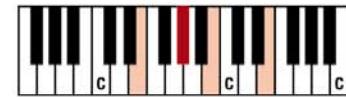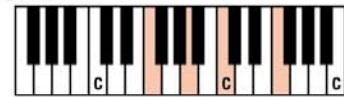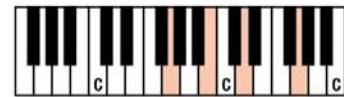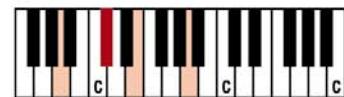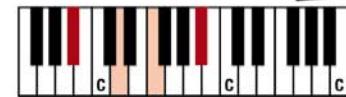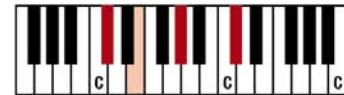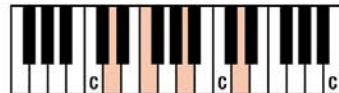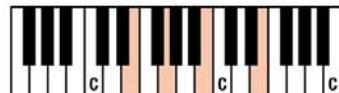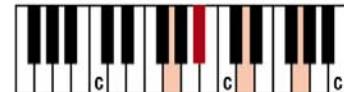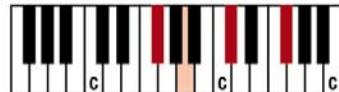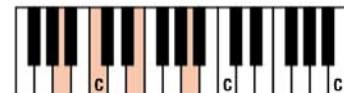
Arpeggios - minor
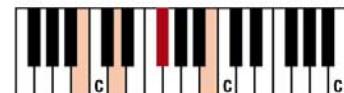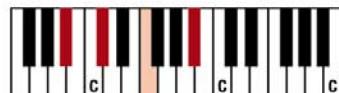
Harp 1 arpeggio ranges

Major 3-note

01 major a3 slow speed	**play range**
01 HA1_3arp-sl_C-ma	C3–C7
02 HA1_3arp-sl_C#-ma	C#3–G#6
03 HA1_3arp-sl_D-ma	D3–A6
04 HA1_3arp-sl_D#-ma	A#2–A#6
05 HA1_3arp-sl_E-ma	B2–B6
06 HA1_3arp-sl_F-ma	C3–A6
07 HA1_3arp-sl_F#-ma	C#3–A#6
08 HA1_3arp-sl_G-ma	B2–B6
09 HA1_3arp-sl_G#-ma	C3–C7
10 HA1_3arp-sl_A-ma	C#3–A6
11 HA1_3arp-sl_A#-ma	D3–A#6
12 HA1_3arp-sl_B-ma	B2–B6

02 major a3 fast speed	**play range**
01 HA1_3arp-fa_C-ma	C3–C7
02 HA1_3arp-fa_C#-ma	C#3–G#6
03 HA1_3arp-fa_D-ma	D3–A6
04 HA1_3arp-fa_D#-ma	A#2–A#6
05 HA1_3arp-fa_E-ma	B2–B6
06 HA1_3arp-fa_F-ma	C3–A6
07 HA1_3arp-fa_F#-ma	C#3–A#6
08 HA1_3arp-fa_G-ma	B2–B6
09 HA1_3arp-fa_G#-ma	C3–C7
10 HA1_3arp-fa_A-ma	C#3–A6
11 HA1_3arp-fa_A#-ma	D3–A#6
12 HA1_3arp-fa_B-ma	B2–B6

03 major a3 straight	**play range**
01 HA1_3arp-st_C-ma	C3–C7
02 HA1_3arp-st_C#-ma	C#3–G#6
03 HA1_3arp-st_D-ma	D3–A6
04 HA1_3arp-st_D#-ma	A#2–A#6
05 HA1_3arp-st_E-ma	B2–B6
06 HA1_3arp-st_F-ma	C3–A6
07 HA1_3arp-st_F#-ma	C#3–A#6
08 HA1_3arp-st_G-ma	B2–B6
09 HA1_3arp-st_G#-ma	C3–C7
10 HA1_3arp-st_A-ma	C#3–A6
11 HA1_3arp-st_A#-ma	D3–A#6
12 HA1_3arp-st_B-ma	B2–B6

Minor 3-note

04 minor a3 slow speed	**play range**
01 HA1_3arp-sl_C-mi	C3–C7
02 HA1_3arp-sl_C#-mi	C#3–G#6
03 HA1_3arp-sl_D-mi	D3–A6
04 HA1_3arp-sl_D#-mi	A#2–A#6
05 HA1_3arp-sl_E-mi	B2–B6
06 HA1_3arp-sl_F-mi	C3–G#6
07 HA1_3arp-sl_F#-mi	C#3–A6
08 HA1_3arp-sl_G-mi	A#2–A#6
09 HA1_3arp-sl_G#-mi	B2–B6
10 HA1_3arp-sl_A-mi	A2–A6
11 HA1_3arp-sl_A#-mi	A#2–A#6
12 HA1_3arp-sl_B-mi	B2–B6

05 minor a3 fast speed	**play range**
01 HA1_3arp-fa_C-mi	C3–C7
02 HA1_3arp-fa_C#-mi	C#3–G#6
03 HA1_3arp-fa_D-mi	D3–A6
04 HA1_3arp-fa_D#-mi	A#2–A#6
05 HA1_3arp-fa_E-mi	B2–B6
06 HA1_3arp-fa_F-mi	C3–G#6
07 HA1_3arp-fa_F#-mi	C#3–A6
08 HA1_3arp-fa_G-mi	A#2–A#6
09 HA1_3arp-fa_G#-mi	B2–B6
10 HA1_3arp-fa_A-mi	A2–A6
11 HA1_3arp-fa_A#-mi	A#2–A#6
12 HA1_3arp-fa_B-mi	B2–B6

06 minor a3 straight

	play range
01 HA1_3arp-st_C-mi	C3–C7
02 HA1_3arp-st_C#-mi	C#3–G#6
03 HA1_3arp-st_D-mi	D3–A6
04 HA1_3arp-st_D#-mi	A#2–A#6
05 HA1_3arp-st_E-mi	B2–B6
06 HA1_3arp-st_F-mi	C3–G#6
07 HA1_3arp-st_F#-mi	C#3–A6
08 HA1_3arp-st_G-mi	A#2–A#6
09 HA1_3arp-st_G#-mi	B2–B6
10 HA1_3arp-st_A-mi	A2–A6
11 HA1_3arp-st_A#-mi	A#2–A#6
12 HA1_3arp-st_B-mi	B2–B6

Major 4-note

01 major a4 slow speed

	play range
01 HA1_4arp-sl_C-ma	C3–G6
02 HA1_4arp-sl_C#-ma	C#3–F6
03 HA1_4arp-sl_D-ma	D3–F#6
04 HA1_4arp-sl_D#-ma	A#2–G6
05 HA1_4arp-sl_E-ma	B2–G#6
06 HA1_4arp-sl_F-ma	C3–F6
07 HA1_4arp-sl_F#-ma	C#3–F#6
08 HA1_4arp-sl_G-ma	B2–G6
09 HA1_4arp-sl_G#-ma	C3–G#6
10 HA1_4arp-sl_A-ma	A3–C#7
11 HA1_4arp-sl_A#-ma	A#3–D7
12 HA1_4arp-sl_B-ma	B2–F#6

02 major a4 fast speed

	play range
01 HA1_4arp-fa_C-ma	C3–G6
02 HA1_4arp-fa_C#-ma	C#3–F6
03 HA1_4arp-fa_D-ma	D3–F#6
04 HA1_4arp-fa_D#-ma	A#2–G6
05 HA1_4arp-fa_E-ma	B2–G#6
06 HA1_4arp-fa_F-ma	C3–F6
07 HA1_4arp-fa_F#-ma	C#3–F#6
08 HA1_4arp-fa_G-ma	B2–G6
09 HA1_4arp-fa_G#-ma	C3–G#6
10 HA1_4arp-fa_A-ma	A3–C#7
11 HA1_4arp-fa_A#-ma	A#3–D7
12 HA1_4arp-fa_B-ma	B2–F#6

03 major a4 straight

	play range
01 HA1_4arp-st_C-ma	C3–G6
02 HA1_4arp-st_C#-ma	C#3–F6
03 HA1_4arp-st_D-ma	D3–F#6
04 HA1_4arp-st_D#-ma	A#2–G6
05 HA1_4arp-st_E-ma	B2–G#6
06 HA1_4arp-st_F-ma	C3–F6
07 HA1_4arp-st_F#-ma	C#3–F#6
08 HA1_4arp-st_G-ma	B2–G6
09 HA1_4arp-st_G#-ma	C3–G#6
10 HA1_4arp-st_A-ma	A3–C#7
11 HA1_4arp-st_A#-ma	A#3–D7
12 HA1_4arp-st_B-ma	B2–F#6

Minor 4-note

04 minor a4 slow speed   play range
01 HA1_4arp-sl_C-mi   C3–G6
02 HA1_4arp-sl_C#-mi   C#3–E6
03 HA1_4arp-sl_D-mi   D3–F6
04 HA1_4arp-sl_D#-mi   A#2–F#6
05 HA1_4arp-sl_E-mi   B2–G6
06 HA1_4arp-sl_F-mi   C3–F6
07 HA1_4arp-sl_F#-mi   C#3–F#6
08 HA1_4arp-sl_G-mi   A#2–G6
09 HA1_4arp-sl_G#-mi   B2–G#6
10 HA1_4arp-sl_A-mi   C3–E6
11 HA1_4arp-sl_A#-mi   C#3–F6
12 HA1_4arp-sl_B-mi   B2–F#6

05 minor a4 fast speed   play range
01 HA1_4arp-fa_C-mi   C3–G6
02 HA1_4arp-fa_C#-mi   C#3–E6
03 HA1_4arp-fa_D-mi   D3–F6
04 HA1_4arp-fa_D#-mi   A#2–F#6
05 HA1_4arp-fa_E-mi   B2–G6
06 HA1_4arp-fa_F-mi   C3–F6
07 HA1_4arp-fa_F#-mi   C#3–F#6
08 HA1_4arp-fa_G-mi   A#2–G6
09 HA1_4arp-fa_G#-mi   B2–G#6
10 HA1_4arp-fa_A-mi   C3–E6
11 HA1_4arp-fa_A#-mi   C#3–F6
12 HA1_4arp-fa_B-mi   B2–F#6

06 minor a4 straight   play range
01 HA1_4arp-st_C-mi   C3–G6
02 HA1_4arp-st_C#-mi   C#3–E6
03 HA1_4arp-st_D-mi   D3–F6
04 HA1_4arp-st_D#-mi   A#2–F#6
05 HA1_4arp-st_E-mi   B2–G6
06 HA1_4arp-st_F-mi   C3–F6
07 HA1_4arp-st_F#-mi   C#3–F#6
08 HA1_4arp-st_G-mi   A#2–G6
09 HA1_4arp-st_G#-mi   B2–G#6
10 HA1_4arp-st_A-mi   C3–E6
11 HA1_4arp-st_A#-mi   C#3–F6
12 HA1_4arp-st_B-mi   B2–F#6